June Meetings

Dates & Times:
Matinee, 2:30 p.m., Wednesday, June 11, 1980

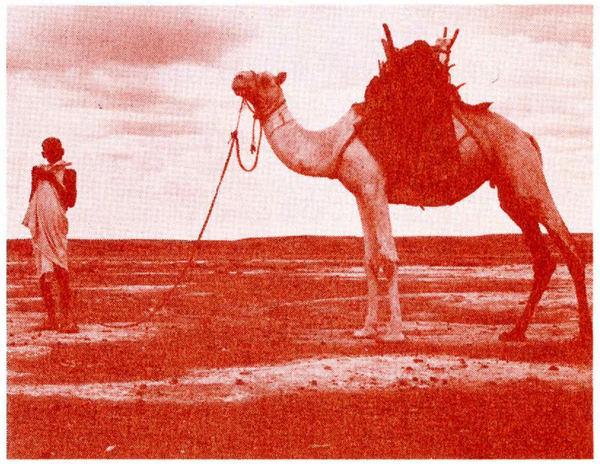
Evenings, 8:00 p.m., Wednesday and Thursday, June 11 and 12, 1980

Place:
May Treat Morrison Auditorium

Subject:
"Nature of Things: The Gabra"

Move with the East African herders across the sand dunes, salt flats, volcanic rubble and dry grasslands along the Kenya/Ethopia frontier.

These Oromo-speaking Gabra nomads number around 20,000 and make up a comparatively small tribe. They have adapted to their habitat by herding camels, cattle, sheep and goats and the products of their herds sustain them with meat, milk, blood, fat and hides. In turn, Gabra life revolves around sustaining these herds; bringing the herds to maximum capabilities is the focus of their existence.



Join us for this fine film by the Canadian Broadcasting Corporation. As usual your membership card admits you through the front entrance of the Academy for the evening presentations and through both Cowell Hall and Wattis Hall entrances for the matinee meeting. Please be prepared to show your membership card at the entrance to the auditorium for the afternoon meeting when the rest of the museum is open to the public.

Morrison Planetarium

Our universe is filled with many things — seething-hot stars, giant planets, brilliant quasars, beautiful nebulas, enormous galaxies, exploding stars, and more. Come and explore these elements in the Morrison Planetarium when **The Universe Unveiled,** our exciting new planetarium show begins on June 6. This show will continue through Labor Day. Showtimes will be at 2:00 p.m. each weekday and at 12:30, 2:00 and 3:30 p.m. on weekends. Evening shows are shown each Wednesday and Thursday at 7:30 p.m.

In addition to the regular sky show, the planetarium presents **Exploring the Skies of the Season,** a tour of the current night sky over San Francisco. You can see this weekend program at 11 a.m. each Saturday and Sunday.

Please Note: Please use your membership planetarium passes for free admission.

Lights Fantastic

Lights Fantastic, a new dimension in audio-visual entertainment at the Morrison Planetarium, premieres on Friday, June 27. Produced by Eye See the Light Show, Inc., the show uses colorful lumias, liquid lights, planetarium and other special effects, as well as several lasers (one of them a powerful 2000 milliwatts) to dazzle and mesmerize the eye. Using a new, all-surrounding sound system, you will hear a variety of music as myriad images spin, pulsate, zoom and flash in concert with the music against a universe of stars on the planetarium's huge dome. Your ticket is your passport to this celestial concert of light and music.

Lights Fantastic will be shown on Friday at 7:30, 9:00 and 10:30 p.m.; on Saturday at 5:00, 7:30, 9:00 and 10:30 p.m.; and on Sundays at 5:00, 7:30 and 9:00 p.m.

Tickets for all performances are available through BASS outlets and remaining tickets go on sale at the planetarium box-office one-half hour before showtime. Admission is $3.50 for adults for all performances; $1.50 (Sunday) and $1.75 (Friday and Saturday) for children under 10 and senior citizens.

Members are reminded that this is **not** a regular planetarium show, **nor** are your planetarium passes usable for this attraction.

Special Exhibits

Great Horned Owl Kachina, one of 150 on display in new exhibit!

HOPI KACHINA: Spirit of Life, a museum exhibit that you can feel without touching continues in Lovell White Hall and African Annex. This nationally touring exhibit transports the museum visitor to the land of the Hopi, America's oldest continuously surviving culture. You will wander through the windswept mesas of northeastern Arizona with your guides, the kachinas, who are the friendly spirit messengers of the Hopi.

HOPI KACHINA: Spirit of Life is presented in conjunction with the Hopi Tricentennial and is made possible by grants from the National Endowment for the Humanities, the Santa Fe Railway Company, Fireman's Fund Insurance Company Foundation, The Hearst Foundation, Transamerica Corporation, and the Pinewood Foundation. A beautifully illustrated color and black and white catalog will be on sale for approximately $10.00. **HOPI KACHINA** will continue through September 1.

To enhance your knowledge of the Hopi way of life guided tours of the exhibit have been planned. Beginning June 3 (Tuesday) and continuing through June, July and August there will be 3 half-hour tours at 11:00 a.m., 1:00 p.m. and 2:00 p.m. every day of the week EXCEPT Monday. Meet in Hohfeld I.

The Ancestors: Native Artisans of the Americas continues in the Peterson-McBean Gallery. The cultures and artisans represented are:

Sioux painter of the Great Plains
Karaja featherworker of Brazil
Haida carver of the Northwest Coast
Pomo basketmaker of northern California
pre-Columbian potter of the American Southeast
Araucanian weaver of Chile

Woven Treasures: The Clay P. Bedford Indian Basket Collection featuring 130 exquisite baskets made by the Indians of western North America remains in the Wattis Gallery through October 19.

Living Arts and Lectures

To enhance students' visits to the Academy's three separate Indian exhibits, **The Ancestors; Woven Treasures;** and **Hopi Kachina: Spirit of Life,** special living arts programs have been scheduled in the Wattis Hall of Man featuring Native Alaskan Eskimo Dances by Patricia Bulitt and Indian story telling by Richard Bagwell.

Ms. Bulitt, a dancer and performer, has had the opportunity to learn native dances in Alaskan villages from the elders of the communities. In costume she portrays "Mother of Mukluk Seals". Richard Bagwell, in native American garb tells Indian stories focusing on the Plains, Northwest Coast and Hopi tribes, sometimes using puppets in his dialogue with the children.

Dick Bagwell,
Indian Legends
on Wednesdays, June 4 & 11,
11:30-Noon

Patricia Bulitt
Eskimo Native Dance
on Fridays, June 6 & 13,
Noon-12:30

Other living arts programs designed to complement the Indian exhibits will be:

Robert Black
Music in Hopi Life
Saturday, June 7, 11:00 and 1:00
(Wattis Hall of Man)

Hubert Honanie and Tirzah Honanie
Saturday and Sunday, June 14 & 15
Hubert Honanie carves Kachinas 11-12:30 and 1:30-3:30 (Wattis Hall of Man) Tirzah bakes piki bread and sells samples in the *Main Courtyard* at 1:00

Harriet Young
Hopi-Tewa Potter
Saturday and Sunday, June 28 & 29
11-12:30 and 2-3:30

Special Lecture

MT. ST. HELENS

youngest of the Cascade range comes alive!

JUNE 4
at 7:30 P.M.
in the Morrison Auditorium

FREE OF CHARGE!

The Cascade mountain range forms a bony spine along the western edge of the United States and although most people are fondly familiar with the names, including Mt. St. Helens, Mt. Hood, Mt. Rainier and Crater Lake, most hikers and vacationers tend to forget that these mountains are actually volcanos and that any of them could erupt at any time!

On March 27, 1980, after a week of local earthquakes, Mt. St. Helens began to erupt steam and ash. Mt. St. Helens, the 9,677 ft. volcano in southwestern Washington State, and the youngest in the Cascade range had come alive again. Join Dr. James G. Moore at a slide/lecture presentation where he will describe the steam blast eruptions, the growth of the summit crater, the character and extent of ash deposition, and the nature of earthquake-triggered snow avalanches. In addition to the new 800 foot deep crater, the summit of the mountain is deformed. The methods used to monitor this deformation will also be discussed.

Dr. Moore is a research geologist with the United States Geological Survey. Besides conducting studies of 15 on-going volcanic eruptions in Hawaii, the Philippines, Japan, Italy and Iceland, he has also participated in 10 oceanographic cruises examining young submarine volcanic products.

This free slide/lecture will be presented in the Morrison Auditorium on June 4 at 7:30 p.m.

Inside the Academy

More Flashlight Fishing . . . Dr. John McCosker, director of Steinhart Aquarium, and Brock Metcalf, UC Berkeley biology student, and scientists from Hebrew University and Scripps Institution of Oceanography teamed up in March to study and collect flashlight fishes from the Gulf of Eilat along the Sinai Peninsula. Their successful catches are currently on display at the Steinhart Aquarium. Their studies concerned the similarities in behavior between the recently-discovered Red Sea species and their relatives from the Phillippines and Comoro islands. They propose that the fish and their symbiotic, light-producing bacteria have evolved at different rates since their separation from ancestral forms. Because the fish reproduce every three or four years, while the bacteria multiply every three or four days, they question the "evolutionary distance" between the partners.

Also on display are three more specimens of Flashlight Fish caught off San Salvador Island in the Bahamas recently. The aquarium is positively twinkling with Flashlight Fish!

JUNIOR ACADEMY

School is out, and it's Junior Academy time again . . . this year 27 courses in the fields of natural and earth sciences for students 6 through 18 will be open for registration on Saturday, June 28 from 10 a.m. to 3 p.m. in the Goethe Room.

Six courses are offered for 6-8 year olds and their parents and one for the ages 6-9 and their parents. Parents are required to attend the classes which include:

What's with this Body of Mine?, California Wildlife, Exploring Nature in Golden Gate Park, Molecules in Action!, Life in the Ocean, Plants and Animals (all for 6-8), and **Earthquakes!** (6-9).

The following classes are offered for students ages 9 through 18, **Animal Homes, Chemistry, The Evolution of Life, Herpetology, Hopi Indians, Marine Biology, Marine Mammals, The Biology of Molluscs, Organisms and Adaptations, Exploring the Solar System** and **Sports and Your Body.**

For those 10 through 18 the classes offered are, **How to Draw Plants and**

Animals, Field Botany, Microscopes and Microscopics, and for the 12 through 18 there is a class in **Aquatic Organisms.**

Pepperwood Star Trek, a weekend family field course (minimum age 6) in stargazing and natural history will be held at the California Academy of Sciences' nature preserve in the mountains of Sonoma County, and **Practical Observational Astronomy** (a family course) will be open to all Junior Academy members and parents.

Two field study trips for ages 13-18 highlight the summer program.

Natural History of the Sierra Nevada, takes you to Camp Leonard in the Sierras near Lake Tahoe for a 7 day course in mountain ecology from August 10-16.

The second field study is **Vertebrate Natural History —** an intensive study of the birds, mammals, reptiles and amphibians of the northern Coast Range of California. The course will include 10 one-hour sessions in the classroom and a 2-day, 1-night field trip to Pepperwood Ranch.

The Junior Academy offers an excellent natural science summer program for students so don't miss registration day on **Saturday, June 28 from 10 a.m. to 3 p.m.** Classes fill quickly so come early that day. Call 221-5100 or write the California Academy of Sciences for additional information and a complete class schedule and outline.

Education and Travel Notes

Two delightful and informative Academy courses begin this month. Registration is by mail and details are available in the Activities Calendar. Please call the Education/Travel Office for information at 221-5100, ext. 211.

A Hidden World: A Study of Insects
June 12-July 10
(4 Thursdays and one field trip)
7-9 p.m.
Instructor: Dr. D. Dee Wilder
Cost: $30 members

Highlights of Astronomy
Session I: June 18-July 2
(3 Wednesdays)
7-9 p.m.
Instructor: Dr. Lee Simon
Cost: $15 members, $20 families

Pueblo Country II: Northeast Arizona
June 6-15

Offered in conjunction with the Academy's exciting exhibit, "Hopi Kachina: Spirit of Life", this 10-day tour will offer members the opportunity to study in depth the ancient native American cultures of Northeastern Arizona. Dr. Dorothy Washburn, Chairman of the Academy's Anthropology Department and expert in the archaeology of this region, leads our tour. Highlights include the Hopi Mesas, Canyon de Chelly, Monument Valley, the Grand Canyon and the Museum of Northern Arizona. Cost is $995 per person, including air fare. For information, please call Gulliver's Travels at (415) 346-4400.

Alaska July 11-26

Alaska, land of abundant wildlife and magnificent scenery is the focus of this 16-day expedition. Join Dr. and Mrs. Robert T. Orr for a cruise to the Columbia Glacier, several days visit in Mt. McKinley National Park, an exploration of Katmai National Monument with its "Valley of Ten Thousand Smokes", and finally a three-day visit to an area of incomparable beauty, Glacier Bay National Monument. For information, please call Siemer & Hand, Ltd. at (415) 788-7186.

National Parks and Monuments of the Western United States
July 26-August 3

A geological exploration of the national parks and monuments of the Western United States will be the focus of this 7-day tour led by Mr. Charles Chesterman, Curator of Mineralogy. Members will fly to Boise to begin their motorcoach tour of the Craters of the Moon National Monument, The Teton Range, the wonders of Yellowstone National Park and the rugged beauty of Glacier National Park. Cost is $998 including airfare. For information, please call Gulliver's Travels at (415) 346-4400.

Zambia and the Seychelles
July 31-August 24

Zambia, Livingstone's Africa and site of Victoria Falls, is the focus of this 26-day expedition. Highlights include game drives in open land rovers in Kafue National Park, a visit to Victoria Falls, a "Sundowner Cruise" on the Zambezi, and a stay in Chibembe Camp in the Luangwa Valley where participants will enjoy a 4-day walking safari and night drives guided by experienced leaders. Five days in the exotic Seychelles complete this African adventure. Led by Academy naturalist Bob Drewes. Cost is $2760 land arrangements, and $1891 air at the current G.I.T. fare. For information, call Bryan International Travel at (415) 986-0967.

The National Treasures of Japan
September 21-October 7

With the leadership of botanist Gladys Smith, members will visit several of the natural and cultural treasures of Japan. On the island of Honshu, points of interest will include Tokyo, Nikko with its spectacular mountain scenery, Ago Bay's famous pearl divers and the classical Buddhist and Shinto shrines of Nara and kyoto. On the northern island of Hokkaido, highlights will include several national parks, hot springs and fabulous botanical gardens. Cost of land arrangements is $1840, air is $1009 at current G.I.T. rates. For information, call Bryan International Travel at (415) 986-0967.

Sea of Cortez
October 25-November 1

Members will join Dr. and Mrs. Robert T. Orr aboard **Baja Explorador** for a memorable cruise through some of the fascinating islands of the Sea of Cortez. Espiritu Santo with its deep coves and beautiful beaches, Isla San Jose and the ruins of Mission Dolores, and Isla Santa Catalina are but a few of the areas members will visit. The variety of wildlife and the beauties of the desert environment combine to offer participants a fulfilling experience in the Sea of Cortez. Cost is $700 per person, including air fare from Los Angeles. for information, please call the Academy Travel Office at (415) 221-5100, ext. 211.

Death Valley National Monument
October 31-November 1

Death Valley, an area of fascinating geologic diversity, will be the focus of this three-day tour. Mr. Charles Chesterman, Honorary Curator of Mineralogy, will lead members as they visit the Desert Museum, view the southern and central portions of the Valley, see the open pit colemanite mine (source of borax), and also visit Scotty's Castle, Ubehebe Crater, and the Devils Cornfield. For information, please call Gulliver's Travels at (415) 346-4400.

New Members of the Academy

Continued from last month

Mrs. Sherry de Ponce
Dr. Leslie A. Dierauf
Ms. Christina Docktor
Marianne Dondero
Mr. James E. Donnelly
Jon & Laurie Drew
Thomas Duff & Family
Mr. David B. Duncan
Sarah E. Eeles
Dr. & Mrs. A. Eisenbaum
Mr. Gilbert L. Elkins
Mr. Peter Erickson
Rose G. Ernsberger
Jan Eshleman
Mr. James Eveland
Mrs. Frank B. Ewing
Mr. Ole Fagerhaugh
Ms. Katy Farley
Denise Ferry
Mary S. Fisher
Mr. Howie Fleck
Mr. & Mrs. James T. Fousekis
Mrs. Susan K. Friedman
Dr. Richard Fulroth
Mr. Richard A. Gale
Teresa Garcia
Mr. Jon-Dirk Gingery
Ms. Hannah Gold
Mr. Wolford L. Griffey
Gail Grodhaus
Mr. & Mrs. Cyril M. Gulassa & Family
Ms. Sara harnish
Mr. & Mrs. Clinton L. Harris
Dr. & Mrs. David Heffelfinger
Miss Karen M. Hemmeter
Ms. Lisa Herod
Mr. Harry Hicks
Ms. Evelyn M. Hilbert
Flora Hill
Ruth E. Hill
Mary Hopkins
Mr. J. M. Horgan
E. M. Hormeman
Ms. Sherryl Howard
Mr. Arthur M. Jackson
Miss Anna-Kajs Johnson
Mr. Tim Jones
Mrs. Cele Kagan
Mr. & Mrs. Norman R. Kanen
R. Kaufman & D. Lenz
Penny Keating
Mrs. Leo M. Kerkof
Ms. Wendy King
Mrs. Juin B. Kirk
Kathleen M. Klesken
Mr. Ted M. Kobayashi
Geraldine Krasner
Lynne D. Krasnow
Mr. David Krilanovich & Family
Kimberly Kroener
Mrs. Norma Kruth
Ms. Jeanne M. Kulberg
Urla Kunasek
Miss Beatrice Lacoste
Mr. Del Lappin
Ms. Janet Laughin
Fredrica Leech
Mr. & Mrs. Jim Leech
Mr. David Lindsay
Mr. & Mrs. Harry F. Louie
Mrs. Patricia L. Lowe
Michele B. Lundy
Sandra Dee MacFarlane
Dr. C. Don MacNeill
Nancy Lee Madsen
Mrs. K. M. Martin
Miss Michele Martin
Mr. & Mrs. Stephen Martin
Mr. & Mrs. Willard R. Martin, Jr.
Stefanie Mattfeld
Mr. & Mrs. L. Mehelis
Mrs. Joanne W. Miller
Mr. Sam Moeller
Mr. & Mrs. James J. Mulvaney
Mr. Tom Murphree
Judie Murrow
Dr. Daniel C. McMahon
Susan S. Nakata
Michel Navd
Susan Novalis
Kristina & Owen O'Donnell
Miss Lorriane O'Lague
Mr. William F. Ottara, Jr.
Mr. Arthur A. Park, Jr.
Mr. & Mrs. Henry C. Patton
Mrs. Greg E. Pedersen
Mr. Racardo P. Perez
Mr. & Mrs. Lawrence Petrini & Family
Mr. Samuel R. Phillips
Mr. & Mrs. Thomas H. Potts
Mrs. Frances M. Power
Mr. Donald Preist
Kathleen A. Prichard
Helen Puerling
Mr. Thomas A. Purvis
Pat Rapier
Mr. & Mrs. Alan Raznick
Miss Sarah J. Reybine
Mr. & Mrs. Stephen D. Reynolds
Mr. & Mrs. Don Ring
Miss Patty Rivette
Christen Roberts
Ruth Roman
Mr. Jack R. Rominger
Trinidad Roque
Nancy & Geoffrey Rotwein
Mr. James E. Runyeon, Jr.
Ms. Janet Ruznick
Mr. & Mrs. Mark Sacharoff
Eleanor K. Sampson
Mr. Gary Sarian
James & Franca Schilt
Dana Scott
Hugh Scott & Susan Gwinn
Ramona Scott
Dr. & Mrs. Julius Segal
Mr. & Mrs Max R. Sellers
Patricia A. Spruill
Mr. & Mrs. Sandy S. Stapleton
Amy Steinhaus
Miss Leah Maria Stocker
P. Cecilia Storr
Corinne E. Stott
Mr. & Mrs. Howard W. Sugarman
Mr. & Mrs. Hasan Sume & Family
Mr. & Mrs. Richard Tagg
Mr. Jim Talboy
Mrs. Siva Tardos
Nathaniel & Susan Taylor
Mr. & Mrs. Otto Teller
Mr. Robert G. Van Herick
Mrs. Lillian verhalen
Mrs. John F. Viera
Mr. Garth Douglas Voigt
Mrs. Maud Volandri
Dr. & Mrs. H. H. Wang
Mr. Michael Warren
Miss Patty Warren
Karen A. Wells
Mrs. Les Wells
Jennifer Wessner
Costello White Jr.
Helen Wigginton
Cora Willeford
Mr. Shinji Yao
Mr. Cal Young
Ms. Diana Young
B. Anne Zishka

Contributing Members

Miss Cornelia J. Dunnagan
Mr. & Mrs. William L. Hoisington
Mrs. Joan Holtzclaw
Mr. Robert Jensen
Mr. & Mrs. H. L. Kempner
Mr. & Mrs. Steven Kinn
Mr. Charles A. Leach
Miss Bonita Martin
Ms. Lois H. Mitchell
Mrs. Seymour B. Quel
Mr. Francis O. Scarpulla
Mr. Marshall L. Small
Mr. Randi Sprotti
Mr. Gary T. Steele
Mr. Robert Tafelski
Mr. Craig W. Vitamanti
Mr. R. A. Weinert
Mr. & Mrs. John Worcester

Continued next month

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